

Results: Of the 43 patients, 7 had calcified lesion of bladder wall after intravesical mitomycin-C therapy and the other 36 didn't. The urinary pH is lower in calcification group (5.43 ± 0.071) than non-calcification group (5.94 ± 0.150 , $p = 0.002$). The calcification group reveal the tendency of higher tumor recurrent rate than non-calcification group (28.6% V.S. 2.8%, $p = 0.014$).

Conclusion: The patients with lower urinary pH during intravesical mitomycin-C therapy are prone to have bladder wall calcification and higher tumor recurrent rate. Our results revealed the calcified lesion might be the cover of tumor. Based on these results, we suggest resect the calcified lesion.

PD8-6:

THE PROGNOSTIC VALUE OF NEUTROPHIL AND LYMPHOCYTE RATIO IN PATIENT RECEIVING RADICAL CYSTECTOMY OPERATIONS

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Purpose: To identify Neutrophil/Lymphocyte ratio(NLR) as a prognostic predictor influencing long term survival for patient undergoing radical cystectomy with different urothelial carcinoma stages

Materials and Methods: We obtained 163 patients who admitted for urothelial carcinoma and underwent radical cystectomy during 2005-2008 in Linkou Chang-Gung Memorial Hospital. The preoperative factors including gender, tumor pathology, tumor size, pathological characteristics and pre-OP lab data were analysed. The paired t-test was used to analyze associations between categorical variables. Multivariate analysis was performed. Significance level was set at $p < 0.05$. All statistical analysis was done with SPSS for MAC.

Results: This study included total 163 cases with mean patient age as 66.6 years old. The most common cell type as infiltrating urothelial carcinoma and 5-year overall survival rate was 43%. We obtained pre-OP lab data for calculating NLR and set different cut points for comparing significance in different groups. When NLR was set as 3, there was significance survival difference between two groups($NLR > 3$, Overall Survival = 45.92M; $NLR < 3$, OS = 56.62M). However, when moving on into multivariate analysis, the NLR was not an independent prognostic factor for patient receiving radical cystectomies. (HR = 1.06, 95% CI = 0.45-2.50, $p = 0.90$).

Conclusion: In patient undergoing radical cystectomies, NLR showed overall survival difference between group when cut point was set at 3. However, further multivariate analysis failed to showed independent prognostic power of NLR in current patient cohort.

Podium-9

Andrology

PD9-1:

THE EFFECT OF EXTRACORPOREAL SHOCK WAVE ON CAVERNOUS NERVE STIMULATION-INDUCED INTRACAVERNOUS PRESSURE INCREASE IN THE DIABETIC RAT

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Purpose: Diabetes mellitus (DM) is commonly associated with erectile dysfunction (ED). Low-intensity extracorporeal shock wave therapy (LI-ESWT) has been used to treat patients with ED. However, the pre-clinical investigation of LI-ESWT for ED is still not enough. Therefore, the objective of this study was to investigate the effect of LI-ESW on cavernous nerve (CN) stimulation-induced intracavernous pressure (ICP) increase in the diabetic rat.

Materials and Methods: Male adult Sprague-Dawley rats (250-300 g) were used. Intraperitoneal injection of streptozotocin (STZ) 70 mg/kg was done to induce DM in the rats. Only rats with blood glucose levels of greater than 300 mg/dl (hyperglycemia) three days after STZ injection were used. Three groups of experimental animals were designed as following: 1)ESW (0.05 mJ/mm²) to penile shaft, 800 shocks twice a week for 2 weeks, 2)ESW (0.05 mJ/mm²) to penile shaft, 1200 shocks twice a

week for 2 weeks, and 3) application of probe without ESW to penile shaft twice a week for 2 weeks as a sham control. A 26-gauge needle was inserted into the corpus cavernosum to monitor the ICP. The CN was electrically stimulated with parameters (5 and 7.5 V, 20 Hz, 2 ms, 1 minute) on the 14th day after 2-week ESW in each of the three group rats. The amount of ICP increase was the difference between the peak ICP and resting ICP. Wilcoxon signed rank test and Mann-Whitney U test were used for statistical analysis.

Results: There was a significant increase of ICP from resting 5.3 ± 0.8 mmHg, 12.0 ± 1.9 mmHg and 5.2 ± 1.3 mmHg to a peak at 74.8 ± 6.5 mmHg ($p = 0.027$), 81.0 ± 6.1 mmHg ($p = 0.028$) and 45.8 ± 6.2 mmHg ($p = 0.028$) after CN stimulation with parameters 7.5 V in group 1, 2 and 3 rats, respectively. The corresponding amount of ICP increase were 69.5 ± 6.9 mmHg, 69.0 ± 5.4 mmHg and 40.7 ± 5.0 mmHg in group 1, 2 and 3 rats, respectively. There was a significant greater amount of ICP increase in the group 1 ($p = 0.015$) and group 2 rats ($p = 0.015$) as compared with group 3 rats (sham control), respectively.

Conclusion: The results suggest that low-intensity extracorporeal shock wave may have a significant enhancing effect on cavernous nerve stimulation-induced intracavernous pressure increase in the diabetic rat.

PD9-2:

EFFECT OF TADALAFIL ONCE DAILY ON ERECTILE FUNCTION IN PATIENTS AFTER ROBOTIC ASSISTED RADICAL PROSTATECTOMY WITH BILATERAL NERVE SPARING

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Purpose: The erectile function post nerve-sparing radical prostatectomy remains a problem to resolve. We measured the erectile function in patients who using Tadalafil 5 mg once daily for 6 months after receiving nerve-sparing radical prostatectomy.

Materials and Methods: A total of 69 patients less than 70 years of age who had adenocarcinoma of prostate with normal preoperative EF undergoing nerve-sparing Robotic assisted radical prostatectomy were included in our trial. They used Tadalafil 5mg once daily for 6 months after surgery. The "Internal Index of Erectile Function-Erectile Function domain (IIEF-EF)" score was used to measure the erectile function in patients who took tadalafil 5 mg once daily for 6 months after receiving bilateral or unilateral nerve-sparing robotic assisted radical prostatectomy. The baseline of IIEF score before and after prostatectomy was recorded.

Results: After using Tadalafil 5mg once daily for 6 months, 48 patients (69.6%) had higher or equal IIEF score than preoperative evaluation. However, 21 patients (30.4%) had lower IIEF score than preoperative score. Twenty-four (35%) patients had complaint of flank soreness but the symptom mostly alleviating after 5 weeks usage. One patient could not tolerate the side effect of insomnia after 2 months of tadalafil usage and was excluded in this trial.

Conclusion: Phosphodiesterase 5 inhibitor (tadalafil 5 mg) is safe and tolerable in patients who receive bilateral or unilateral nerve-sparing robotic assisted radical prostatectomy. Tadalafil 5 mg once daily was proven to be effective in restoring erectile function and was suggested to use in patients after radical prostatectomy. The effect after cessation of tadalafil 5 mg once daily need to be evaluated in the future.

PD9-3:

THE EFFICACY OF INCREASING COITAL FREQUENCY IN THE TREATMENT OF PREMATURE EJACULATION

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Purpose: Premature ejaculation is a common consultation in urological clinic. This study is designed to compare the early outcome of increasing coital frequency and traditional behavioral therapy in the treatment of patients with premature ejaculation.

Materials and Methods: Between Jun 2013 and Dec 2014, 60 patients who were diagnosed of premature ejaculation (IELT < 1 min) with low coital frequency (≤ 2 per week), stable sexual partners, normal erectile function and without associate underlying diseases were included and were randomized divided into two groups (study and control group, 30 patients each, respectively). The patients in study group were informed to increase their weekly sexual frequency to ≥ 3 . The patients in control group were taught to carry out the behavioral therapy included stop and start technique or squeeze technique. Ejaculatory latency increased more than 50% of the baseline and 30 seconds more on patients who ejaculated at the time of vaginal penetration after 3 months practice were considered to be effective.

Results: The mean ages of the study and control groups were 37.2 ± 11.9 and 36.3 ± 12.2 years, respectively. The average weekly coital frequency is similar to both groups (1.1 per week and 1.2 per week in study and control groups, respectively) before the training course. The effective rate in study and control group was 37% (11/30) and 30% (9/30), respectively ($P > 0.05$). Mean increased ejaculatory latency time in study group and control group was 2.6 minutes and 2.8 minutes, respectively. 5 patients in control group complained that they were difficult to reerect their penis again in short time after detumescence during the training course.

No side effects were noted in both groups.

Conclusion: Increasing coital frequency appears to provide comparable effect and lesser technique barrier to traditional behavioral therapy in patients with premature ejaculation.

PD9-4:

EXPLORATION OF THE ASSOCIATION BETWEEN DIETARY INTAKE AND ENDOTHELIAL FUNCTION AMONG VASCULOGENIC ERECTILE DYSFUNCTION POPULATION

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Purpose: The aim of present study was to evaluate the association between dietary intake and endothelial function among the erectile dysfunction males attending for clinics.

Materials and Methods: We performed a prospective study between March 2014 and June 2014 at the urology OPD in Tri-Service General Hospital. Forty-four patients were enrolled and filled out the IIEF (the international index of erectile function) questionnaire. The 24-hour dietary recall and peripheral arterial tonometry (PAT) were conducted. Augmentation index (AI%) and reactive hyperemia index (RHI%) were represented systematic arterial stiffness and endothelial-dependent vasodilation respectively.

Results: Our final results showed that vegetable intake which portions adjusted by 1000 kcal of, were negatively related to IIEF score. A negative correlation was noted between AI% and IIEF score, and the association between AI% and exchange of whole grain intake was also observed. In addition, RHI% was marked associated with intake of poly-unsaturated fatty acid.

Conclusion: Dietary intakes were related to endothelial function among ED patients, especially whole grain products and the vegetables. Detailed the mechanism of pathogenesis should be examined in future larger study.

PD9-5:

BDNF-HYPERSECRETING HUMAN UMBILICAL CORD BLOOD MESENCHYMAL STEM CELLS PROMOTE ERECTILE FUNCTION IN A RAT MODEL OF CAVERNOUS NERVE ELECTROCAUTERY INJURY

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Purpose: Erectile dysfunction (ED) continues to be a significant problem for men following radical prostatectomy.

Aim: To test the hypothesis that intracavernous injection of BDNF-hypersecreting human umbilical cord blood mesenchymal stem cells (hUCB-MSCs) can ameliorate ED in a rat model of cavernous nerve electrocautery injury (CNEI).

Materials and Methods: Forty-two male Sprague-Dawley rats were randomly divided into 4 groups. Group A: Sham operation rats intracavernosally injected with PBS (n = 6), Group B: CNEI rats intracavernosally injected with PBS (n = 12), Group C: CNEI rats intracavernosally injected with hUCB-MSCs (n = 12), Group D: CNEI rats intracavernosally injected with BDNF-hUCB-MSCs (n = 12).

Main Outcome Measures: At week 4, the rats in each group underwent electrostimulation of the cavernous nerves to assess erectile function. Penile tissues were collected for histological examinations (Masson's trichrome; Immunofluorescence for S-100 and α -SMA; TUNEL assay). Transmission electron microscopy (TEM) was used to examine the CN distal to the site of injury.

Results: Four weeks after injection, rats which received BDNF-hUCB-MSCs showed the most significant improvement in the ratio of maximal ICP to MAP (ICP/MAP) compared with both the CNEI+hUCB-MSCs and CNEI+PBS animals ($P < 0.001$). Histological examinations showed moderate recovery of S-100 positive nerve fibers, ratio of smooth muscle to collagen and smooth muscle content in the CNEI+hUCB-MSCs group and remarkable recovery in the CNEI+BDNF-hUCB-MSCs group compared to the CNEI+PBS group ($P < 0.05$). Furthermore, there was a significant reduction of apoptotic index in the corpus cavernosum of the CNEI+hUCB-MSCs and CNEI+BDNF-hUCB-MSCs rats compared with the CNEI+PBS animals ($P < 0.05$). By TEM examination, atrophy of myelinated and nonmyelinated nerve fibers was noted in CNEI+PBS group, and significant recovery was observed in two treated groups.

Conclusion: Intracavernous injection of BDNF-hypersecreting hUCB-MSCs can enhance the recovery of erectile function, promote the CNs regeneration, protect against cells apoptosis and inhibit corpus cavernosum fibrosis after CNEI in a rat model.

Keywords: Electrocautery injury, Erectile dysfunction(ED), Radical prostatectomy(RP), Brain-derived neurotrophic factor(BDNF), Human umbilical cord blood mesenchymal stem cells (hUCB-MSCs)

PD9-6:

EXPERIMENTAL RESEARCH ON THE ESTABLISHMENT AND COMPARISON OF RAT CAVERNOUS NERVE FORCEPS CLAMPED AND ELECTROCOAGULATION INJURY MODEL

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Podium-10

Urinary Tract Infection

PD10-1:

FACTORS ASSOCIATED WITH AND TREND OF RESISTANCE TO ANTIBIOTICS AMONG UROPATHOGENS

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